EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Justin Zahrt on April 9, 2010.

The application has been amended as follows:

Cancel claims 56-60.

The following is an examiner's statement of reasons for allowance:

Claims 33-40 are allowable over the prior art of record because the prior art of record does not teach an apparatus comprising a first group of spaced-apart cathode/target assemblies operable to deposit a first sublayer on a substrate, wherein a thickness of said first sublayer increases from an inner diameter to an outer diameter of said substrate; a second group of spaced-apart cathode/target assemblies operable to deposit a second sublayer on said substrate, wherein a thickness of said second sublayer increases from said inner diameter to said outer diameter of said substrate; a third group of spaced-apart cathode/target assemblies operable to deposit a third sublayer on said substrate, wherein a thickness of said third sublayer decreases from said inner diameter to said outer diameter of said substrate; and a transportation unit for transporting said substrate/workpiece past said first group of spaced-apart cathode/target assemblies, said second group of spaced-apart cathode/target

assemblies, and said third group of spaced-apart cathode/target assemblies, wherein said first sublayer, said second sublayer, and said third sublayer collectively form a substantially uniform thickness layer.

Claims 41-47 are allowable over the prior art of record because the prior art of record does not teach transporting at least one substrate/workpiece past a first group of spaced apart cathode/target assemblies that deposits a first sublayer on said at least one substrate/workpiece, wherein a thickness of said first sublayer increases from an inner diameter to an outer diameter of said at least one substrate/workpiece; transporting said at least one substrate/workpiece past a second group of spaced-apart cathode/target assemblies that deposits a second sublayer on said at least one substrate/workpiece, wherein a thickness of said second sublayer increases from said inner diameter to said outer diameter of said at least one substrate/workpiece; and transporting said at least one substrate/workpiece past a third group of spaced-apart cathode/target assemblies that deposits a third sublayer on said at least one substrate/workpiece, wherein a thickness of said third sublayer decreases from said inner diameter to said outer diameter of said at least one substrate/workpiece, wherein said first sublayer, said second sublayer, and said third sublayer collectively form a substantially uniform thickness layer.

Claims 48-55 are allowable over the prior art of record because the prior art of record does not teach a first deposition station having a first group of annularly-shaped magnetron magnet assemblies operable to deposit a first sublayer on a substrate, wherein a thickness of said first sublayer increases from an inner diameter to an outer

diameter of said substrate; a second disposition station having a second group of annularly-shaped magnetron magnet assemblies operable to deposit a second sublayer on said substrate, wherein a thickness of said second sublayer increases from said inner diameter to said outer diameter of said substrate; a third disposition station having a third group of annularly-shaped magnetron magnet assemblies operable to deposit a third sublayer on said substrate, wherein a thickness of said third sublayer decreases from said inner diameter to said outer diameter of said substrate; and a transportation unit for transporting said substrate past each deposition station, wherein said first sublayer, said second sublayer, and said third sublayer collectively form a substantially uniform thickness layer.

The closest prior art of record to Akiyama et al. (Japan 2000-057640) or Nagano (Japan 01-287269) fail to teach an apparatus or method where the three sublayers are deposited by cathode/target assemblies or magnetron magnet assemblies to collectively form a uniform thick layer where each sublayer has thickness profile characteristics as defined by the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney G. McDonald whose telephone number is 571-272-1340. The examiner can normally be reached on M-Th with every Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rodney G. McDonald/
Primary Examiner, Art Unit 1795

Rodney G. McDonald
Primary Examiner
Art Unit 1795

RM
June 30, 2010